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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/804,515 | 03/19/2004 | Masayoshi Yamaguchi | 671302-2006 | 7637 |

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| EXAMINER |
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LIETO, LOUIS D

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| ART UNIT | PAPER NUMBER |
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1632

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/804,515

Applicant(s)

YAMAGUCHI, MASAYOSHI

Examiner

Louis D. Lieto

Art Unit

1632

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 July 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☒ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 25-30 and 32-39.
Claim(s) withdrawn from consideration: 1-24.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

Anne-Marie Falk
ANNE-MARIE FALK, PH.D
PRIMARY EXAMINER

Continuation of 3. NOTE: Applicant has amended the claims so that they now include new matter unsupported by the specification as filed. Specifically applicant has amended the claims so that they are drawn to a transgenic rodent model instead of a transgenic animal model. A review of the specification does not reveal any support for the genus of transgenic rodents as presently claimed. Further, new claims 41-53 require further search and consideration. Therefore the claims filed on 2/02/06 remain pending and under consideration.

Continuation of 11. does NOT place the application in condition for allowance because: Claim Objections

The objection to claims 26, 32, 34 to because of informalities is maintained because the claims filed on 2/02/06 remain pending. The un-entered amendments to the claims filed on 7/24/06 would likely be found to be sufficient in overcoming the objections if entered.

Therefore the objection is maintained for reasons of record as set forth above and in the previous office action of 4/25/06.

Claim Rejections - 35 USC § 112

The rejection of claims 25-30, 32-39 under 35 U.S.C. 112, first paragraph, is maintained, because the specification, while being enabling for a transgenic rat comprising a transgene comprising the rat regucalcin gene, wherein the rat over expresses regucalcin, which causes a decrease in bone density, bone strength or bone thickness, a method of using said transgenic rat in a screening method for preventative and therapeutic agents, does not reasonably provide enablement for any non-human animal that over expresses regucalcin and shows bone pathology, a method of using said animal in a screening method for preventative and therapeutic agents, and a therapeutic or preventative agent. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

Applicant's arguments are directed towards the un-entered amendments to the claims filed on 7/24/06 and are not found to be persuasive. Further as previously stated: As of the effective filing date of the claimed invention, the art of making any non-human transgenic animals was known to be unpredictable. It is noted that the unpredictability of a particular art area may alone provide reasonable doubt as to the accuracy of the broad statement made in support of enablement of claims. See *Ex parte Singh*, 17 USPQ2d 1714 (BPAI 1991). It is also well established in case law that the specification must teach those of skill in the art how to make and how to use the invention as broadly claimed. In *re Goodman*, 29 USPQ2d at 2013 (Fed. Cir. 1994), citing *In re Vaeck*, 20 USPQ2d at 1445 (Fed. Cir. 1991). In the instant case, there is no evidence in the specification which supports that the enormous number of non-human transgenic animals claimed by applicant can be readily obtained without undue experimentation. The manufacture of a single regucalcin transgenic rat model is not sufficient enablement for applicant's broadly claimed invention. Accordingly, as the specification provides insufficient guidance and "experiments in genetic engineering produce, at best, unpredictable results" (*Ex parte Forman*, 230 USPQ 546 (BPAI 1986)), it would have required one of skill in the art undue experimentation to prepare any non-human transgenic animal, other than a regucalcin transgenic rat model, commensurate in scope with then claims. Therefore the rejection is maintained for reasons of record as set forth above and in the previous office actions of 4/25/06 and 11/03/05.